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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/684,185	10/12/2003	Felix Rodriguez	JDN 0301	2582

7590  
Aqua Maker LLC  
10627 Kinghurst Drive  
Houston, TX 77099

11/24/2004

EXAMINER

CINTINS, IVARS C

ART UNIT PAPER NUMBER

1724

DATE MAILED: 11/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

### Application No.

10/684,185

### Applicant(s)

RODRIGUEZ, FELIX

### Examiner

Ivars C. Cintins

### Art Unit

1724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_.

This application contains two claims identified by the number 10, and two claims identified by the number 11. Accordingly, the second appearing claims 10 and 11 have been renumbered as claims 12 and 13, respectively, in accordance with 37 C.F.R. § 1.126. Also, claims 12-27 have been renumbered as claims 14-29, respectively; and the dependencies of second appearing claim 11 through claim 27 have been changed to reflect the new claim numbering.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 12 is rejected under 35 U.S.C. 102(b) as being clearly anticipated by Atsumi et al. (U.S. Patent No. 5,151,122) or Matsumoto et al. (U.S. Patent No. 5,531,908). Each of the references discloses a composition comprising zeolite and a compound of zinc (see col. 5, lines 63-64 of Atsumi et al.; and col. 3, lines 27-28 of Matsumoto et al.); and this is all that is required by claim 12.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 13-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Atsumi et al. or Matsumoto et al. Each of the references discloses the claimed invention with the exception of the type of zeolite employed (claims 13-16 and 18-24), the type of zinc compound employed

(claims 14-16, 20 and 21), the manner in which the zeolite is contacted with the zinc compound (claims 17-24), the size of the zeolite particles (claims 22-24), and pH of the zeolite (claim 24). However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ clinoptilolite as the zeolite in either reference system, since this clinoptilolite is a well known natural zeolite material. Similarly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ the recited zinc salts in forming the treatment material of either reference system, since these zinc salts are capable of introducing zinc ions into the zeolite of these reference systems. Furthermore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to form the material of either reference by boiling the zeolite in a solution of the zinc compound, in order to promote the exchange of zinc ions for other cations in this zeolite; and to then wash the resultant material with distilled water, in order to remove any residual reactant therefrom. Moreover, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ a zeolite having the recited particle size in the system of either primary reference, in order to facilitate handling of this zeolite material. Also, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ a zeolite having the recited pH in the system of either reference, in order to maintain a neutral pH for the water undergoing treatment.

Claims 25-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Atsumi et al. or Matsumoto et al. as applied above, and further in view of Leonard (U.S. Patent No. 4,247,524). Each of the primary references, as modified above, discloses the claimed invention with the exception of the recited hydrothermal treatment. Leonard teaches hydrothermal

treatment of clinoptilolite; and it would have been obvious to one of ordinary skill in the art at the time the invention was made to activated the zeolite of either modified primary reference in the manner taught by Leonard, in order to increase its capacity for zinc ions.

Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admitted prior art in view of Matsumoto et al. Applicant has admitted that it is known to produce drinking water by condensation (page 1, lines 18-19 of the specification). Matsumoto et al. teaches contacting drinking water (col. 4, lines 26-27 and 45) with a zinc-impregnated zeolite (col. 3, lines 27-28) in order to reduce its microbial contamination. It would have been obvious to one of ordinary skill in the art at the time the invention was made to purify the admittedly known drinking water by the technique of Matsumoto et al., in order to reduce the microbial contamination of this admittedly known water. Again, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ clinoptilolite as the zeolite in either reference system, since this clinoptilolite is a well known natural zeolite material. Also, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ a zeolite having the recited particle size in the system of either primary reference, in order to facilitate handling of this zeolite material. Furthermore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to wash the zeolite of the modified primary reference with distilled water, in order to remove any contaminants therefrom. Moreover, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ a zeolite having the recited pH, in order to maintain a neutral pH for the water undergoing treatment.

Claims 6-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admitted prior art in view of Matsumoto et al. as applied above, and further in view of Leonard. The modified primary reference discloses the claimed invention with the exception of the recited hydrothermal treatment. Leonard teaches hydrothermal treatment of clinoptilolite; and it would have been obvious to one of ordinary skill in the art at the time the invention was made to activated the zeolite of the modified primary reference in the manner taught by Leonard, in order to increase its capacity for zinc ions. Again, it would have been obvious to one of ordinary skill in the art at the time the invention was made to form the material of the modified primary reference by boiling the zeolite in a solution of the zinc compound, in order to promote the exchange of zinc ions for other cations in this zeolite. Furthermore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ the recited zinc salts in forming the treatment material of the modified primary reference, since these zinc salts are capable of introducing zinc ions into the zeolite of the primary reference in substantially the same manner as the zinc salt employed by Matsumoto et al., to produce substantially the same results.

Hayakawa et al. (U.S. Patent No. 5,961,843) discloses an antimicrobial material comprising zeolite and zinc chloride or zinc sulfate (see col. 10, lines 1-12).

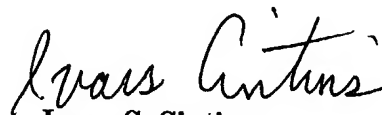
Any inquiry concerning this communication or earlier communications from the examiner should be directed to I. Cintins whose telephone number is (571) 272-1155. The examiner can normally be reached on Monday through Friday from 8:30 AM to 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Duane Smith, can be reached at (571) 272-1166.

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The centralized facsimile number for the USPTO is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
**Ivars C. Cintins**  
**Primary Examiner**  
**Art Unit 1724**

I. Cintins  
November 20, 2004